IN THE CLAIMS

1-19. (Canceled)

20-41. (Cancel)

42. (New) A process for removing water from a first solution, said process comprising:

i) providing a first solution comprising seawater or brackish water,

ii) forming a second solution having a higher osmotic potential than the first solution by dissolving a selected solute in water, wherein the second solution formed is substantially free of components that cause membrane fouling,

iii) including an additive selected from the group consisting of anti-scaling agents, anti-fouling agents, corrosion inhibitors and disinfectants in the second solution,

a) positioning a first selective membrane between the first solution and the second solution, such that water from the first solution passes across the first membrane to dilute the second solution by direct osmosis, and

(b) passing the diluted second solution through a nano-filtration membrane, wherein the second solution contains solute species too large to pass through the pores of the first selective membrane and the nanofiltration membrane.

43. (New) The process as claimed in claim 42, wherein the additive is at least one of an anti-scaling agent and an anti-fouling agent.

44. (New) The process as claimed in claim 43, wherein the additive additionally includes at least one of corrosion inhibiters and disinfectants.

45. (New) The process as claimed in claim 42, wherein the nano-filtration membrane is suitable for the separation of components that are 0.001 to 0.01 microns in size.

46. (New) The process as claimed in claim 42, including the steps of dividing the diluted second solution from step (a) into a first portion and a second portion, extracting solvent from the first portion by passing the first portion through the nanofiltration membrane of step (b), and extracting solvent from the second portion by at least one of crystal-lization and distillation.

47. (New) The process as claimed in claim 46, comprising treating the residue from the nanofiltration step (b) by at least one of a crystallization and distillation technique.

48. (New) The process as claimed in claim 47, wherein the crystal-lization and distillation technique is selected from multi-flash distillation, multi-effect distillation, mechanical vapour compression, MED-thermo compression and rapid spray distillation.

49. (New) The process as claimed in claim 42, wherein the second solution is an aqueous solution and said solute species is selected from the group consisting of $MgSO_4 \cdot 6H_2O$, $MgSO_4 \cdot 7H_2O$, $MgCl_2 \cdot 6H_2O$,

$Na_2SO_4 \cdot 10H_2O$, $CaCl_2 \cdot 2H_2O$, $CaCl_2 \cdot 6H_2O$, potassium alum$\cdot 24H_2O$, potassium chloride, $Na_2HPO_4 \cdot 12H_2O$.

50. (New) The process as claimed in claim 42, wherein an elevated pressure induced in the second solution by influx of water from the first solution is used to assist in the extraction of water from the second solution.

51. (New) The process as claimed in claim 42, wherein after water from the first solution passes across the membrane to dilute the second solution, the diluted second solution is contacted with one side of a further selective membrane and a further solution having a higher osmotic potential than the diluted second solution is contacted with the other side of the membrane, such that water from the diluted second solution passes across the membrane to dilute the further solution.

52. (New) The process as claimed in claim 42, comprising circulating the second solution in a closed loop, such that said additives are reused.

53. (New) The process as claimed in claim 42, wherein the selective membrane of step a) has an average pore size of 5 to 50 Angstroms.

54. (New) The process as claimed in claim 42, wherein the selective membrane has an average pore size of at least 10 Angstroms and the second solution contains solute species that are too large to pass through pores of the membrane.

55. (New) The process as claimed in claim 54, wherein the solute species in the second solution comprises at least one of an cationic species and an anionic species that is larger than an average pore size of the nanofiltration membrane.

56. (New) The process as claimed in claim 42, wherein the water extracted from the second solution is used to pump oil from oil wells.

57. (New) The process as claimed in claim 42, including heating the solution on either side of the first selective membrane to a temperature of up to 80°C.

58 (New) The process as claimed in claim 42, comprising extracting water from the diluted second solution of step (b) by two or more sequential nanofiltration steps.